

The diagram illustrates the proposed system architecture, which consists of three main functional blocks connected in series:

- Voltage-Current Converter (11):** This block takes an input voltage  $V_{in}$  (positive and negative terminals) and converts it into a current signal.
- Current Shared Circuit (12):** This central block receives the current signal from block 11 and provides two output terminals,  $V_c$  (positive) and  $V_b$  (negative), which are connected to the input of the next block.
- Current-Voltage Converter (13):** This block takes the current signal from block 12 and converts it back into a voltage signal, producing the final output voltage  $V_o$  (positive and negative terminals).

[illegible]

FIG. 3

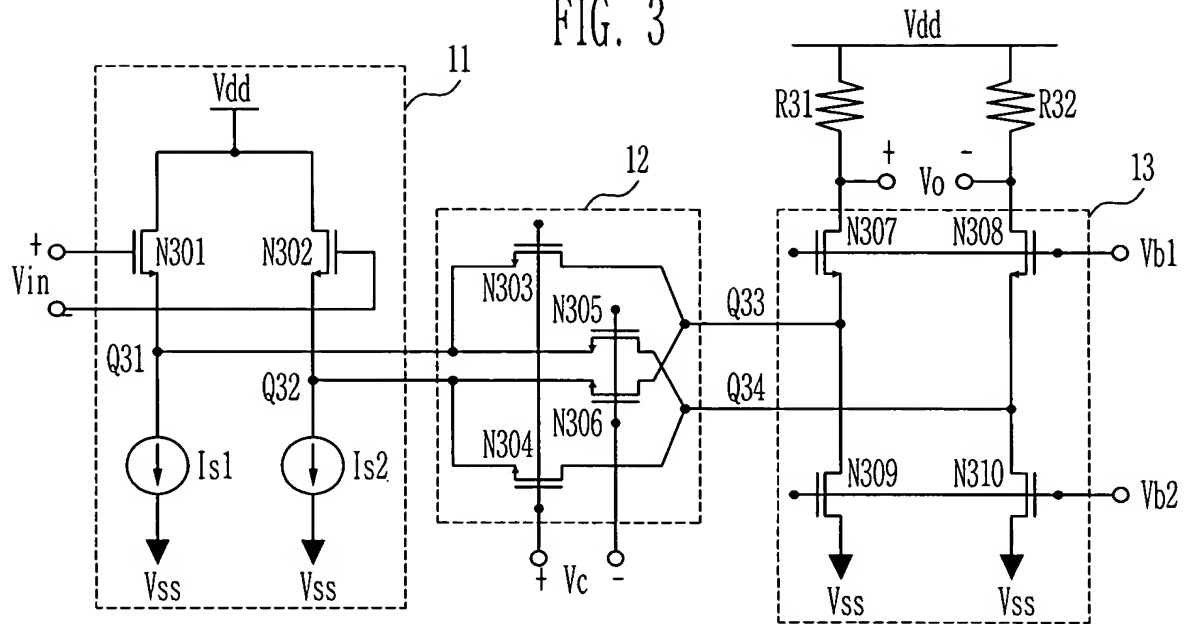


FIG. 4

